



ERP01.003APC.TXT

SEQUENCE LISTING

<110> Schor, Seth Lawrence
Schor, Ana Marie

<120> Polypeptides, Polynucleotides, and Uses
Thereof

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<140> US 09/581,651

<141> 2000-10-10

<150> PCT/GB98/03766

<151> 1998-12-15

<150> GB 9726539.1

<151> 1997-12-16

<160> 41

<170> FastSEQ for Windows Version 4.0

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<212> PRT

<213> Homo sapiens

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35 40 45
Arg Gln Ala Gln Gln Met Val Gln Pro Gln Ser Pro Val Ala Val Ser
50 55 60
Gln Ser Lys Pro Gly Cys Tyr Asp Asn Gly Lys His Tyr Gln Ile Asn
65 70 75 80
Gln Gln Trp Glu Arg Thr Tyr Leu Gly Asn Ala Leu Val Cys Thr Cys
85 90 95
Tyr Gly Gly Ser Arg Gly Phe Asn Cys Glu Ser Lys Pro Glu Ala Glu
100 105 110
Glu Thr Cys Phe Asp Lys Tyr Thr Gly Asn Thr Tyr Arg Val Gly Asp
115 120 125
Thr Tyr Glu Arg Pro Lys Asp Ser Met Ile Trp Asp Cys Thr Cys Ile
130 135 140
Gly Ala Gly Arg Gly Arg Ile Ser Cys Thr Ile Ala Asn Arg Cys His
145 150 155 160
Glu Gly Gly Gln Ser Tyr Lys Ile Gly Asp Thr Trp Arg Arg Pro His
165 170 175
Glu Thr Gly Gly Tyr Met Leu Glu Cys Val Cys Leu Gly Asn Gly Lys
180 185 190
Gly Glu Trp Thr Cys Lys Pro Ile Ala Glu Lys Cys Phe Asp His Ala
195 200 205
Ala Gly Thr Ser Tyr Val Val Gly Glu Thr Trp Glu Lys Pro Tyr Gln
210 215 220
Gly Trp Met Met Val Asp Cys Thr Cys Leu Gly Glu Gly Ser Gly Arg
225 230 235 240
Ile Thr Cys Thr Ser Arg Asn Arg Cys Asn Asp Gln Asp Thr Arg Thr
245 250 255
Ser Tyr Arg Ile Gly Asp Thr Trp Ser Lys Lys Asp Asn Arg Gly Asn

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Pro Pro Tyr Gly His Cys Val Thr Asp Ser Gly Val Val Tyr Ser Val
      325      330      335
Gly Met Gln Trp Leu Lys Thr Gln Gly Asn Lys Gln Met Leu Cys Thr
      340      345      350
Cys Leu Gly Asn Gly Val Ser Cys Gln Glu Thr Ala Val Thr Gln Thr
      355      360      365
Tyr Gly Gly Asn Ser Asn Gly Glu Pro Cys Val Leu Pro Phe Thr Tyr
      370      375      380
Asn Asp Arg Thr Asp Ser Thr Thr Ser Asn Tyr Glu Gln Asp Gln Lys
      385      390      395      400
Tyr Ser Phe Cys Thr Asp His Thr Val Leu Val Gln Thr Arg Gly Gly
      405      410      415
Asn Ser Asn Gly Ala Leu Cys His Phe Pro Phe Leu Tyr Asn Asn His
      420      425      430
Asn Tyr Thr Asp Cys Thr Ser Glu Gly Arg Arg Asp Asn Met Lys Trp
      435      440      445
Cys Gly Thr Thr Gln Asn Tyr Asp Ala Asp Gln Lys Phe Gly Phe Cys
      450      455      460
Pro Met Ala Ala His Glu Ile Cys Thr Thr Asn Glu Gly Val Met
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Tyr Arg Ile Gly Asp Gln Trp Asp Lys Gln His Asp Met Gly His Met
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Met Arg Cys Thr Cys Val Gly Asn Gly Arg Gly Glu Trp Thr Cys Ile
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Ala Tyr Ser Gln Leu Arg Asp Gln Cys Ile Val Asp Asp Ile Thr Tyr
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Asn Cys Thr Cys Phe Gly Gln Gly Arg Gly Arg Trp Lys Cys Asp Pro
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      565      570      575
Asp Ser Trp Glu Lys Tyr Val His Gly Val Arg Tyr Gln Cys Tyr Cys
      580      585      590
Tyr Gly Arg Gly Ile Gly Glu Trp His Cys Gln Pro Leu Gln Thr Tyr
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Pro Ser Ser Ser Gly Pro Val Glu Val Phe Ile Thr Glu Thr Pro Ser
      610      615      620
Gln Pro Asn Ser His Pro Ile Gln Trp Asn Ala Pro Gln Pro Ser His
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Asn Leu Gly Tyr
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 Lys Pro Gly Cys Tyr Asp Asn Gly Lys His Tyr Gln Ile Asn Gln Gln
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 Trp Glu Arg Thr Tyr Leu Gly Asn Ala Leu Val Cys Thr Cys Tyr Gly
 65 70 75 80
 Gly Ser Arg Gly Phe Asn Cys Glu Ser Lys Pro Glu Ala Glu Glu Thr
 85 90 95
 Cys Phe Asp Lys Tyr Thr Gly Asn Thr Tyr Arg Val Gly Asp Thr Tyr
 100 105 110
 Glu Arg Pro Lys Asp Ser Met Ile Trp Asp Cys Thr Cys Ile Gly Ala
 115 120 125
 Gly Arg Gly Arg Ile Ser Cys Thr Ile Ala Asn Arg Cys His Glu Gly
 130 135 140
 Gly Gln Ser Tyr Lys Ile Gly Asp Thr Trp Arg Arg Pro His Glu Thr
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 Gly Gly Tyr Met Leu Glu Cys Val Cys Leu Gly Asn Gly Lys Gly Glu
 165 170 175
 Trp Thr Cys Lys Pro Ile Ala Glu Lys Cys Phe Asp His Ala Ala Gly
 180 185 190
 Thr Ser Tyr Val Val Gly Glu Thr Trp Glu Lys Pro Tyr Gln Gly Trp
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 Met Met Val Asp Cys Thr Cys Leu Gly Glu Gly Ser Gly Arg Ile Thr
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 Cys Thr Ser Arg Asn Arg Cys Asn Asp Gln Asp Thr Arg Thr Ser Tyr
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 Arg Ile Gly Asp Thr Trp Ser Lys Lys Asp Asn Arg Gly Asn Leu Leu
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 260 265 270
 His Thr Ser Val Gln Thr Thr Ser Ser Gly Ser Gly Pro Phe Thr Asp
 275 280 285
 Val Arg Ala Ala Val Tyr Gln Pro Gln Pro His Pro Gln Pro Pro Pro
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 Tyr Gly His Cys Val Thr Asp Ser Gly Val Val Tyr Ser Val Gly Met
 305 310 315 320
 Gln Trp Leu Lys Thr Gln Gly Asn Lys Gln Met Leu Cys Thr Cys Leu
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 Gly Asn Gly Val Ser Cys Gln Glu Thr Ala Val Thr Gln Thr Tyr Gly
 340 345 350
 Gly Asn Ser Asn Gly Glu Pro Cys Val Leu Pro Phe Thr Tyr Asn Asp
 355 360 365
 Arg Thr Asp Ser Thr Thr Ser Asn Tyr Glu Gln Asp Gln Lys Tyr Ser
 370 375 380
 Phe Cys Thr Asp His Thr Val Leu Val Gln Thr Arg Gly Gly Asn Ser
 385 390 395 400
 Asn Gly Ala Leu Cys His Phe Pro Phe Leu Tyr Asn Asn His Asn Tyr
 405 410 415
 Thr Asp Cys Thr Ser Glu Gly Arg Arg Asp Asn Met Lys Trp Cys Gly
 420 425 430
 Thr Thr Gln Asn Tyr Asp Ala Asp Gln Lys Phe Gly Phe Cys Pro Met
 435 440 445
 Ala Ala His Glu Glu Ile Cys Thr Thr Asn Glu Gly Val Met Tyr Arg
 450 455 460
 Ile Gly Asp Gln Trp Asp Lys Gln His Asp Met Gly His Met Met Arg
 465 470 475 480
 Cys Thr Cys Val Gly Asn Gly Arg Gly Glu Trp Thr Cys Ile Ala Tyr
 485 490 495
 Ser Gln Leu Arg Asp Gln Cys Ile Val Asp Asp Ile Thr Tyr Asn Val
 500 505 510
 Asn Asp Thr Phe His Lys Arg His Glu Glu Gly His Met Leu Asn Cys
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 Thr Cys Phe Gly Gln Gly Arg Gly Arg Trp Lys Cys Asp Pro Val Asp

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530	Gln Cys Gln Asp Ser	535	Glu Thr Gly Thr Phe Tyr	540	Gln Ile Gly Asp Ser
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	Arg Gly Ile Gly Glu Trp His Cys	580	Gln Pro Leu Gln Thr Tyr Pro Ser	585	
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<213> Homo sapiens

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<212> PRT

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<211> 20

<212> PRT

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<210> 9

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<212> PRT

<213> Homo sapiens

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<210> 10

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<212> PRT

<213> Homo sapiens

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<211> 39

<212> PRT

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

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<210> 13

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<212> PRT

<213> Homo sapiens

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<210> 14

<211> 20

<212> PRT

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

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Leu	Cys	Leu	Gly	Thr	Ala	Val	Pro	Ser	Thr	Gly	Ala	Ser	Lys	Ser	Lys
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Arg	Gln	Ala	Gln	Gln	Met	Val	Gln	Pro	Gln	Ser	Pro	Val	Ala	Val	Ser
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Gln	Ser	Lys	Pro	Gly	Cys	Tyr	Asp	Asn	Gly	Lys	His	Tyr	Gln	Ile	Asn
65					70					75					80
Gln	Gln	Trp	Glu	Arg	Thr	Tyr	Leu	Gly	Asn	Val	Leu	Val	Cys	Thr	Cys
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Tyr	Gly	Gly	Ser	Arg	Gly	Phe	Asn	Cys	Glu	Ser	Lys	Pro	Glu	Ala	Glu
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Glu	Thr	Cys	Phe	Asp	Lys	Tyr	Thr	Gly	Asn	Thr	Tyr	Arg	Val	Gly	Asp
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Thr	Tyr	Glu	Arg	Pro	Lys	Asp	Ser	Met	Ile	Trp	Asp	Cys	Thr	Cys	Ile
		130				135					140				
Gly	Ala	Gly	Arg	Gly	Arg	Ile	Ser	Cys	Thr	Ile	Ala	Asn	Arg	Cys	His
145					150					155					160
Glu	Gly	Gly	Gln	Ser	Tyr	Lys	Ile	Gly	Asp	Thr	Trp	Arg	Arg	Pro	His
			165						170					175	
Glu	Thr	Gly	Gly	Tyr	Met	Leu	Glu	Cys	Val	Cys	Leu	Gly	Asn	Gly	Lys
			180					185					190		
Gly	Glu	Trp	Thr	Cys	Lys	Pro	Ile	Ala	Glu	Lys	Cys	Phe	Asp	His	Ala
		195					200					205			
Ala	Gly	Thr	Ser	Tyr	Val	Val	Gly	Glu	Thr	Trp	Glu	Lys	Pro	Tyr	Gln
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Gly	Trp	Met	Met	Val	Asp	Cys	Thr	Cys	Leu	Gly	Glu	Gly	Ser	Gly	Arg
225					230					235					240
Ile	Thr	Cys	Thr	Ser	Arg	Asn	Arg	Cys	Asn	Asp	Gln	Asp	Thr	Arg	Thr
			245						250					255	
Ser	Tyr	Arg	Ile	Gly	Asp	Thr	Trp	Ser	Lys	Lys	Asp	Asn	Arg	Gly	Asn
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Leu	Leu	Gln	Cys	Ile	Cys	Thr	Gly	Asn	Gly	Arg	Gly	Glu	Trp	Lys	Cys
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Glu	Arg	His	Thr	Ser	Val	Gln	Thr	Thr	Ser	Ser	Gly	Ser	Gly	Pro	Phe
		290				295					300				
Thr	Asp	Val	Arg	Ala	Ala	Val	Tyr	Gln	Pro	Gln	Pro	His	Pro	Gln	Pro
305					310					315					320
Pro	Pro	Tyr	Gly	His	Cys	Val	Thr	Asp	Ser	Gly	Val	Val	Tyr	Ser	Val
			325						330					335	
Gly	Met	Gln	Trp	Leu	Lys	Thr	Gln	Gly	Asn	Lys	Gln	Met	Leu	Cys	Thr
			340					345					350		
Cys	Leu	Gly	Asn	Gly	Val	Ser	Cys	Gln	Glu	Thr	Ala	Val	Thr	Gln	Thr
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Tyr	Gly	Gly	Asn	Ser	Asn	Gly	Glu	Pro	Cys	Val	Leu	Pro	Phe	Thr	Tyr
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Asn	Gly	Arg	Thr	Phe	Tyr	Ser	Cys	Thr	Thr	Glu	Gly	Arg	Gln	Asp	Gly
385					390					395					400
His	Leu	Trp	Cys	Ser	Thr	Thr	Ser	Asn	Tyr	Glu	Gln	Asp	Gln	Lys	Tyr
			405						410					415	
Ser	Phe	Cys	Thr	Asp	His	Thr	Val	Leu	Val	Gln	Thr	Gln	Gly	Asn	
			420					425					430		
Ser	Asn	Gly	Ala	Leu	Cys	His	Phe	Pro	Phe	Leu	Tyr	Asn	Asn	His	Asn
		435					440					445			
Tyr	Thr	Asp	Cys	Thr	Ser	Glu	Gly	Arg	Arg	Asp	Asn	Met	Lys	Trp	Cys
		450				455					460				
Gly	Thr	Thr	Gln	Asn	Tyr	Asp	Ala	Asp	Gln	Lys	Phe	Gly	Phe	Cys	Pro
465					470					475					480
Met	Ala	Ala	His	Glu	Glu	Ile	Cys	Thr	Thr	Asn	Glu	Gly	Val	Met	Tyr

Arg	Ile	Gly	Asp	Gln	Trp	Asp	Lys	Gln	His	Asp	Met	Gly	His	Met	Met
Arg	Cys	Thr	Cys	Val	Gly	Asn	Gly	Arg	Gly	Glu	Trp	Thr	Cys	Tyr	Ala
Tyr	Ser	Gln	Leu	Arg	Asp	Gln	Cys	Ile	Val	Asp	Asp	Ile	Thr	Tyr	Asn
Val	Asn	Asp	Thr	Phe	His	Lys	Arg	His	Glu	Glu	Gly	His	Met	Leu	Asn
Cys	Thr	Cys	Phe	Gly	Gln	Gly	Arg	Gly	Arg	Trp	Lys	Cys	Asp	Pro	Val
Asp	Gln	Cys	Gln	Asp	Ser	Glu	Thr	Gly	Thr	Phe	Tyr	Gln	Ile	Gly	Asp
Ser	Trp	Glu	Lys	Tyr	Val	His	Gly	Val	Arg	Tyr	Gln	Cys	Tyr	Cys	Tyr
Gly	Arg	Gly	Ile	Gly	Glu	Trp	His	Cys	Gln	Pro	Leu	Gln	Thr	Tyr	Pro
Ser	Ser	Ser	Gly	Pro	Val	Glu	Val	Phe	Ile	Thr	Glu	Thr	Pro	Ser	Gln
Pro	Asn	Ser	His	Pro	Ile	Gln	Trp	Asn	Ala	Pro	Gln	Pro	Ser	His	Ile
Ser	Lys	Tyr	Ile	Leu	Arg	Trp	Arg	Pro	Lys	Asn	Ser	Val	Gly	Arg	Trp
Lys	Glu	Ala	Thr	Ile	Pro	Gly	His	Leu	Asn	Ser	Tyr	Thr	Ile	Lys	Gly
Leu	Lys	Pro	Gly	Val	Val	Tyr	Glu	Gly	Gln	Leu	Ile	Ser	Ile	Gln	Gln
Tyr	Gly	His	Gln	Glu	Val	Thr	Arg	Phe	Asp	Phe	Thr	Thr	Thr	Ser	Thr

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<212> PRT
<213> Homo sapiens
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<220>
<221> VARIANT
<222> 676, 679, 683, 717
<223> Xaa = Any Amino Acid
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			20					25					30			
Leu	Cys	Leu	Gly	Thr	Ala	Val	Pro	Ser	Thr	Gly	Ala	Ser	Lys	Ser	Lys	
		35					40					45				
Arg	Gln	Ala	Gln	Gln	Met	Val	Gln	Pro	Gln	Ser	Pro	Val	Ala	Val	Ser	
	50					55					60					
Gln	Ser	Lys	Pro	Gly	Cys	Tyr	Asp	Asn	Gly	Lys	His	Tyr	Gln	Ile	Asn	
65					70					75					80	
Gln	Gln	Trp	Glu	Arg	Thr	Tyr	Leu	Gly	Asn	Val	Leu	Val	Cys	Thr	Cys	
			85						90					95		
Tyr	Gly	Gly	Ser	Arg	Gly	Phe	Asn	Cys	Glu	Ser	Lys	Pro	Glu	Ala	Glu	
			100					105					110			
Glu	Thr	Cys	Phe	Asp	Lys	Tyr	Thr	Gly	Asn	Thr	Tyr	Arg	Val	Gly	Asp	
		115					120					125				
Thr	Tyr	Glu	Arg	Pro	Lys	Asp	Ser	Met	Ile	Trp	Asp	Cys	Thr	Cys	Ile	
		130				135					140					
Gly	Ala	Gly	Arg	Gly	Arg	Ile	Ser	Cys	Thr	Ile	Ala	Asn	Arg	Cys	His	
145					150					155					160	
Glu	Gly	Gly	Gln	Ser	Tyr	Lys	Ile	Gly	Asp	Thr	Trp	Arg	Arg	Pro	His	

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				165					170					175			
Glu	Thr	Gly	Gly	Tyr	Met	Leu	Glu	Cys	Val	Cys	Leu	Gly	Asn	Gly	Lys		
			180					185					190				
Gly	Glu	Trp	Thr	Cys	Lys	Pro	Ile	Ala	Glu	Lys	Cys	Phe	Asp	His	Ala		
		195					200					205					
Ala	Gly	Thr	Ser	Tyr	Val	Val	Gly	Glu	Thr	Trp	Glu	Lys	Pro	Tyr	Gln		
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Gly	Trp	Met	Met	Val	Asp	Cys	Thr	Cys	Leu	Gly	Glu	Gly	Ser	Gly	Arg		
225				230					235						240		
Ile	Thr	Cys	Thr	Ser	Arg	Asn	Arg	Cys	Asn	Asp	Gln	Asp	Thr	Arg	Thr		
			245						250					255			
Ser	Tyr	Arg	Ile	Gly	Asp	Thr	Trp	Ser	Lys	Lys	Asp	Asn	Arg	Gly	Asn		
			260					265					270				
Leu	Leu	Gln	Cys	Ile	Cys	Thr	Gly	Asn	Gly	Arg	Gly	Glu	Trp	Lys	Cys		
		275					280					285					
Glu	Arg	His	Thr	Ser	Val	Gln	Thr	Ser	Ser	Gly	Ser	Gly	Pro	Phe			
	290					295				300							
Thr	Asp	Val	Arg	Ala	Ala	Val	Tyr	Gln	Pro	Gln	Pro	His	Pro	Gln	Pro		
305				310					315					320			
Pro	Pro	Tyr	Gly	His	Cys	Val	Thr	Asp	Ser	Gly	Val	Val	Tyr	Ser	Val		
			325						330					335			
Gly	Met	Gln	Trp	Leu	Lys	Thr	Gln	Gly	Asn	Lys	Gln	Met	Leu	Cys	Thr		
		340						345					350				
Cys	Leu	Gly	Asn	Gly	Val	Ser	Cys	Gln	Glu	Thr	Ala	Val	Thr	Gln	Thr		
		355					360					365					
Tyr	Gly	Gly	Asn	Ser	Asn	Gly	Glu	Pro	Cys	Val	Leu	Pro	Phe	Thr	Tyr		
	370					375					380						
Asn	Gly	Arg	Thr	Phe	Tyr	Ser	Cys	Thr	Thr	Glu	Gly	Arg	Gln	Asp	Gly		
385				390						395				400			
His	Leu	Trp	Cys	Ser	Thr	Thr	Ser	Asn	Tyr	Glu	Gln	Asp	Gln	Lys	Tyr		
			405					410					415				
Ser	Phe	Cys	Thr	Asp	His	Thr	Val	Leu	Val	Gln	Thr	Gln	Gly	Gly	Asn		
			420					425					430				
Ser	Asn	Gly	Ala	Leu	Cys	His	Phe	Pro	Phe	Leu	Tyr	Asn	Asn	His	Asn		
		435					440					445					
Tyr	Thr	Asp	Cys	Thr	Ser	Glu	Gly	Arg	Arg	Asp	Asn	Met	Lys	Trp	Cys		
	450					455				460							
Gly	Thr	Thr	Gln	Asn	Tyr	Asp	Ala	Asp	Gln	Lys	Phe	Gly	Phe	Cys	Pro		
465				470					475						480		
Met	Ala	Ala	His	Glu	Glu	Ile	Cys	Thr	Thr	Asn	Glu	Gly	Val	Met	Tyr		
			485					490					495				
Arg	Ile	Gly	Asp	Gln	Trp	Asp	Lys	Gln	His	Asp	Met	Gly	His	Met	Met		
		500						505					510				
Arg	Cys	Thr	Cys	Val	Gly	Asn	Gly	Arg	Gly	Glu	Trp	Thr	Cys	Tyr	Ala		
		515					520					525					
Tyr	Ser	Gln	Leu	Arg	Asp	Gln	Cys	Ile	Val	Asp	Asp	Ile	Thr	Tyr	Asn		
	530					535				540							
Val	Asn	Asp	Thr	Phe	His	Lys	Arg	His	Glu	Glu	Gly	His	Met	Leu	Asn		
545				550					555					560			
Cys	Thr	Cys	Phe	Gly	Gln	Gly	Arg	Gly	Arg	Trp	Lys	Cys	Asp	Pro	Val		
			565					570					575				
Asp	Gln	Cys	Gln	Asp	Ser	Glu	Thr	Gly	Thr	Phe	Tyr	Gln	Ile	Gly	Asp		
		580						585					590				
Ser	Trp	Glu	Lys	Tyr	Val	His	Gly	Val	Arg	Tyr	Gln	Cys	Tyr	Cys	Tyr		
	595					600						605					
Gly	Arg	Gly	Ile	Gly	Glu	Trp	His	Cys	Gln	Pro	Leu	Gln	Thr	Tyr	Pro		
	610					615					620						
Ser	Ser	Ser	Gly	Pro	Val	Glu	Val	Phe	Ile	Thr	Glu	Thr	Pro	Ser	Gln		
625				630					635						640		
Pro	Asn	Ser	His	Pro	Ile	Gln	Trp	Asn	Ala	Pro	Gln	Pro	Ser	His	Ile		
			645					650					655				
Ser	Lys	Tyr	Ile	Leu	Arg	Trp	Arg	Pro	Val	Ser	Ile	Pro	Pro	Arg	Asn		
			660					665					670				

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Leu Gly Tyr Xaa Val Ser Xaa Ser Gln Phe Xaa Trp Phe Leu Phe Phe
675 680 685
Pro Ala Phe Glu Pro Thr Thr Leu Ile Asn Tyr Ser Tyr Ser Ile Tyr
690 695 700
Tyr Ile Cys Leu Val Asn Lys Gln Tyr Val Val Asn Xaa Ile Asp
705 710 715

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<400> 19
Asn Leu Val Ala Thr Cys Leu Pro Val Arg Ala Ser Leu Pro His Arg
1 5 10 15
Leu Asn

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<211> 31
<212> PRT
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<400> 20
Met Leu Arg Gly Pro Gly Pro Gly Leu Leu Leu Ala Val Gln Cys
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Leu Gly Thr Ala Val Pro Ser Thr Gly Ala Ser Lys Ser Lys Arg
20 25 30

<210> 21
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<400> 21
Gln Ala Gln Gln Met Val Gln Pro Gln Ser Pro Val Ala Val Ser Gln
1 5 10 15
Ser Lys Pro Gly
20

<210> 22
<211> 45
<212> PRT
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<400> 22
Cys Tyr Asp Asn Gly Lys His Tyr Gln Ile Asn Gln Gln Trp Glu Arg
1 5 10 15
Thr Tyr Leu Gly Asn Ala Leu Val Cys Thr Cys Tyr Gly Gly Ser Arg
20 25 30
Gly Phe Asn Cys Glu Ser Lys Pro Glu Ala Glu Glu Thr
35 40 45

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<400> 23

Cys Phe Asp Lys Tyr Thr Gly Asn Thr Tyr Arg Val Gly Asp Thr Tyr
 1 5 10 15
 Glu Arg Pro Lys Asp Ser Met Ile Trp Asp Cys Thr Cys Ile Gly Ala
 20 25 30
 Gly Arg Gly Arg Ile Ser Cys Thr Ile Ala Asn Arg
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<400> 24

Cys His Glu Gly Gly Gln Ser Tyr Lys Ile Gly Asp Thr Trp Arg Arg
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 Pro His Glu Thr Gly Gly Tyr Met Leu Glu Cys Val Cys Leu Gly Asn
 20 25 30
 Gly Lys Gly Glu Trp Thr Cys Lys Pro Ile Ala Glu Lys
 35 40 45

<210> 25

<211> 45

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<213> Homo sapiens

<400> 25

Cys Phe Asp His Ala Ala Gly Thr Ser Tyr Val Val Gly Glu Thr Trp
 1 5 10 15
 Glu Lys Pro Tyr Gln Gly Trp Met Met Val Asp Cys Thr Cys Leu Gly
 20 25 30
 Glu Gly Ser Gly Arg Ile Thr Gly Thr Ser Arg Asn Arg
 35 40 45

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<400> 26

Cys Asn Asp Gln Asp Thr Arg Thr Ser Tyr Arg Ile Gly Asp Thr Trp
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 Ser Lys Lys Asp Asn Arg Gly Asn Leu Leu Gln Cys Ile Cys Thr Gly
 20 25 30
 Asn Gly Arg Gly Glu Trp Lys Cys Glu Arg
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<210> 27

<211> 35

<212> PRT

<213> Homo sapiens

<400> 27

His Thr Ser Val Gln Thr Thr Ser Ser Gly Ser Gly Pro Phe Thr Asp
 1 5 10 15
 Val Arg Ala Ala Val Tyr Gln Pro Gln Pro His Pro Gln Pro Pro Pro
 20 25 30
 Tyr Gly His
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<210> 28
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 <212> PRT
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<400> 28
 Cys Val Thr Asp Ser Gly Val Val Tyr Ser Val Gly Met Gln Trp Leu
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 Lys Thr Gln Gly Asn Lys Gln Met Leu Cys Thr Cys Leu Gly Asn Gly
 20 25 30
 Val Ser Cys Gln Glu
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<210> 29
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 <212> PRT
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<400> 29
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 Val Leu Pro Phe Thr Tyr Asn Asp Arg Thr Asp Ser Thr Thr Ser Asn
 20 25 30
 Tyr Glu Gln Asp Gln Lys Tyr Ser Phe Cys Thr Asp His
 35 40 45

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<400> 30
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 1 5 10 15
 His Phe Pro Phe Leu Tyr Asn Asn His Asn Tyr Thr Asp Cys Thr Ser
 20 25 30
 Glu Gly Arg Arg Asp Asn Met Lys Trp Cys Gly Thr Thr Gln Asn Tyr
 35 40 45
 Asp Ala Asp Gln Lys Phe Gly Phe Cys Pro Met Ala Ala His Glu Glu
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 Ile
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<400> 31
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 1 5 10 15
 Lys Gln His Asp Met Gly His Met Met Arg Cys Thr Cys Val Gly Asn
 20 25 30
 Gly Arg Gly Glu Trp Thr Cys Ile Ala Tyr Ser Gln Leu Arg Asp Gln
 35 40 45

<210> 32

<211> 43

<212> PRT

<213> Homo sapiens

<400> 32

Cys Ile Val Asp Asp Ile Thr Tyr Asn Val Asn Asp Thr Phe His Lys
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 Arg His Glu Glu Gly His Met Leu Asn Cys Thr Cys Phe Gly Gln Gly
 20 25 30
 Arg Gly Arg Trp Lys Cys Asp Pro Val Asp Gln
 35 40

<210> 33

<211> 48

<212> PRT

<213> Homo sapiens

<400> 33

Cys Gln Asp Ser Glu Thr Gly Thr Phe Tyr Gln Ile Gly Asp Ser Trp
 1 5 10 15
 Glu Lys Tyr Val His Gly Val Arg Tyr Gln Cys Tyr Cys Tyr Gly Arg
 20 25 30
 Gly Ile Gly Glu Trp His Cys Gln Pro Leu Gln Thr Tyr Pro Ser Ser
 35 40 45

<210> 34

<211> 39

<212> PRT

<213> Homo sapiens

<400> 34

Ser Gly Pro Val Glu Val Phe Ile Thr Glu Thr Pro Ser Gln Pro Asn
 1 5 10 15
 Ser His Pro Ile Gln Trp Asn Ala Pro Gln Pro Ser His Ile Ser Lys
 20 25 30
 Tyr Ile Leu Arg Trp Arg Pro
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<210> 35

<211> 10

<212> PRT

<213> Homo sapiens

<400> 35

Val Ser Ile Pro Pro Arg Asn Leu Gly Tyr
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<210> 36

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<212> PRT

<213> Homo sapiens

<400> 36

Val Ser
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<210> 37

<211> 4

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<400> 37
Ser Tyr Gln Phe
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<210> 38
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<213> Homo sapiens

<400> 38
Trp Phe Leu Phe Phe Pro Ala Phe Glu Pro Thr Thr Leu Ile Asn Tyr
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Ser Tyr Ser Ile Tyr Tyr Ile Cys Leu Val Asn Lys Gln Tyr Val Val
20 25 30
Asn

<210> 39
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<400> 39
Ile Asp Leu
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Thr Glu Lys Lys Lys Lys Lys Lys
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<210> 41
<211> 10
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<400> 41
Val Ser Ile Pro Pro Arg Asn Leu Gly Tyr
1 5 10